DoD

Defense Manpower Data Center

Defense Enrollment Eligibility Reporting System/Military Health System (DEERS)/(MHS)

Technical Specifications

For the

TRICARE National Enrollment Database (NED) Solution

Prepared for
The Office of the Undersecretary of Defense
(Personnel and Readiness)
and
Defense Manpower Data Center

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Contents

1. REQUIREMENTS OVERVIEW

The Defense Manpower Data Center (DMDC) has been tasked to perform an architectural redesign of the Military Health System (MHS) TRICARE information system. This effort will be accomplished via the Defense Enrollment Eligibility Reporting System (DEERS), the MHS eligibility and enrollment database.

DMDC and the TRICARE Management Activity (TMA) have created several documents that address the entire redesign of MHS TRICARE requirements for DEERS to attain full operational capability (FOC): the Interface Operational Description (IOD), the External Interface Specifications (EIS), and the Data Conversion Specifications. FOC for the redesign will be implemented on a future date, still to be determined. However, in order to provide health care portability within the TMA-specified timeframe, an interim step towards FOC has been proposed. The requirements for this implementation solution for portability are:

1. To support as much TRICARE portability as possible, as quickly as possible, no later than the TMA-specified date.

2. To minimize changes to the Managed Care Support Contractors (MCSC), Designated Providers (DPs) and TMA systems, in order to reduce the level of effort and the timeline for implementation.

3. To provide a subset of the final systems solution so that the initial portability solution completes the first phase of the complete redesign as described in the DEERS IOD v13.1.

The DEERS redesign is a very large and extensive project that will affect numerous information systems that support TRICARE. The decreased scope of the National Enrollment Database (NED) portability solution affords the opportunity to analyze and refine the FOC solution through prototyping. To this end, the initial NED release will include the following:

1. Centralization of TRICARE enrollment information into the National Enrollment Database that will include enrollment programs, enrollment dates, and fees. This includes enrollments with Direct Care, Civilian, and Uniformed Services Family Health Program (USFHP) network providers. In addition, the USFHP program is being incorporated into TRICARE Prime and therefore, most of the separate USFHP coverage plans listed in IOD v.13.1 are being eliminated. Beneficiaries who choose to enroll with the USFHP will be enrolled in the appropriate TRICARE Prime coverage plan with a USFHP network primary care manager (PCM). There will be separate TRICARE coverage plans to support the eligible persons over 65 and dependent parent and parent-in-law beneficiaries having the TRICARE benefit only with a USFHP network provider. This coverage plan distinction will readily identify the specific provider network selection necessary for this type of benefit from the regular TRICARE Prime benefit that allows the selection of most provider networks.

2. A centrally developed enrollment client platform that will standardize enrollment information and eliminate the need for MCSCs/DPs to develop their own TRICARE enrollment platforms. This platform will be provided to all organizations and sites that perform TRICARE enrollments. The client application is the DEERS On-Line Eligibility and Enrollment System (DOES).

Table 1 summarizes the FOC solution (FY2001 implementation) and compares it with the NED Solution.

Table 1

FOC Solution (From IOD)	NED Solution
Conduct full MHS information redesign of DEERS to reflect TMA TRICARE program processes, to include new policy and plan structures and identifiers (e.g., DEERS Identifiers for all beneficiaries).	Only the central system (DEERS) moves to these new constructs through the common enrollment application fielded by DMDC to the MCSCs/DPs. MCSC/DP systems and CHCS will retain current legacy data formats; DEERS will translate legacy data that is received, and data and values that are transmitted (e.g., Sponsor SSN and dependent legacy DDS for beneficiaries). Existing fields in DEERS will contain the legacy values. The data values for new attributes will be the new DEERS values as listed in the NED data dictionary. In addition, DEERS will send the DEERS Id and the Patient Id to the MCSCs/DPs, and the Patient Id to CHCS for storage in their systems. Exceptions to the MCSC/DP using the current DEERS legacy data are: (1) MCSCs/DPs will be using the DEERS enrollment / disenrollment client application. (2) MCSCs/DPs will provide batch updates of Enrollment Fees; MCSCs will also provide bulk PCM changes (currently only supported for changes to Civilian network providers). (3) MCSCs/DPs and CHCS will process enrollment and disenrollment push notifications from DEERS.

FOC Solution (From IOD)	NED Solution
	When DEERS finds that duplicate records for a beneficiary exist, DEERS will merge the records and send the new Patient Id to CHCS sites to whom the former Patient Id had been reported. This notification is called the Patient Id Change Notification (PCN) and is detailed in Appendix A. Upon receipt of this notification, DEERS expects the receiving system to send a Patient Id Change Acknowledgement (PCA), also described in Appendix A.
Enrollment information to be stored centrally includes enrollment dates, health care delivery plans, anniversary dates, fee payment selections, residence address, current enrollment region, network provider type, Enrolling Division DMIS ID, PCM Identifier (unformatted), PCM Name, PCM ZIP Code and PCM Phone number.	Assignment for Direct Care and USFHP PCMs will take place at the facility rendering care. DEERS will only store the PCM Region, PCM Enrolling Division DMIS ID and PCM Network Provider Type Code for these enrollments. Additionally, for Direct Care network PCM assignments, MCSCs may enter enrollees' PCM preference information into DOES; DEERS will store this information for display in DOES as well as for inclusion on the enrollment notification sent to CHCS. For Civilian network PCM assignments, DEERS will store all attributes described in IOD v.13.1.

FOC Solution (From IOD)	NED Solution
Convert current DEERS data; reconcile and reload the MCSCs/DPs data with the confirmed enrollment data in the redesigned format. (Before this can be accomplished, the MCSC in each region must reconcile with each Composite Health Care System (CHCS) to obtain Active Duty enrollees and Direct Care network PCM information.)	To accomplish the NED portability solution, a conversion of current DEERS data and a reconciliation of the MCSCs' and DEERS' must be performed. The conversion and reconciliation will proceed as with the full solution except that DEERS will return confirmed enrollment notification in the current legacy format. The capability of DEERS to identify and reconcile inter-contractor split enrollment situations will be available in a subsequent release, not in the initial release; therefore, a family who has family members enrolled in different contract areas will have multiple policies. Direct Care network PCM selection will occur at the MTF-level in CHCS. The reconciliation of PCM by name should be handled between the MCSC and CHCS. There will not be a reconciliation process for the USFHP network provider enrollments. DEERS will solely convert this information to the appropriate coverage plan and provide confirmed enrollment data to reload their systems.

FOC Solution (From IOD)	NED Solution
Enrollments will be performed by MCSCs/DPs only, with Direct Care network PCM information provided by CHCS sites to the MCSCs. Enrollment capability through CHCS will no longer be available. CHCS sites will be informed of enrollment to a Direct Care network PCM by a push of enrollment notifications from DEERS.	Enrollment functionality as described in IOD v.13.1 will be supported with the exception of online fee payments (other than the initial payment accompanying an enrollment), fee history transactions and re-enrollment. Additionally, to further support portability, disenrollments will not be restricted to the MCSC/DP managing the enrollment when a beneficiary relocates and does not wish to re-enroll with the new MCSC/DP. The concept of Survivor coverage plans has also changed since the publication of IOD v.13.1. When an Active Duty sponsor dies, DEERS will disenroll the surviving family member(s) from their Active Duty plan and enroll them in TRICARE Prime Individual Coverage for Transitional Survivors of Active Duty Deceased Sponsors or TRICARE Prime Family Coverage for Transitional Survivors of Active Duty Deceased Sponsors for three years following the date of death. After that period, the family member(s) will be disenrolled from the transitional survivor plan and will be eligible to enroll in TRICARE Prime Individual Coverage for Survivors of Active Duty Deceased Sponsors or TRICARE Prime Family Coverage for Survivors of Active Duty Deceased Sponsors. These coverage plans require enrollment fees.

FOC Solution (From IOD)	NED Solution
	The enrollment application will only be provided to the MCSCs/DPs. DEERS will inform CHCS sites of enrollment information affecting their Direct Care network PCMs. DEERS will also notify the appropriate CHCS host sites for enrollments involving Civilian network PCM assignments (currently regions 1, 2/5 only) to facilitate patient registration and referral processes. The USFHP enrollments will be accomplished with the use of the network providers indicating USFHP network PCM selection. Enrollment notifications for enrollment activities with USFHP PCM selections will be sent to the Iowa Foundation for Medical Care (IFMC), who will distribute the notifications to the appropriate DPs. CHCS sites will not be notified of USFHP enrollment activity. Additionally, re-enrollments will no longer be communicated between the MCSCs/DPs and DEERS. DEERS will automatically create a new policy enrollment period 45-days prior to the expiration of the current policy. The MCSCs/DPs will be responsible for performing re-enrollments on their systems, independent of DEERS activities. The only exception will be that if the new enrollment period is less than 12 months due to loss of eligibility, DEERS will send a notification with the new enrollment end date and end reason.
Disenrollments performed by DEERS due to loss of eligibility are pushed to all MCSC/DP and CHCS sites that share the enrollment information.	Disenrollments performed by DEERS due to loss of eligibility are pushed from DEERS to all MCSC/DP and CHCS sites that share the enrollment information for Direct Care, Civilian (currently regions 1, 2/5 only), and USFHP network PCM assignments.

FOC Solution (From IOD)	NED Solution
Newborns added and enrolled pending confirmation of eligibility.	Not done in this release. Newborns must be added to DEERS by a Verifying Official (VO) prior to enrollment. DEERS will not support conditional enrollments.
All information transferred by X12 (business) and HL7 (clinical).	Where already existing, transfers remain in legacy format. All new transfers consist of only legacy data in DEERS proprietary formats.
Conversion from legacy systems is to include forced consolidation of split family enrollments, both intra- and inter-regionally.	Only intra-contractor split family enrollments are consolidated currently in the MCSCs'/DPs' systems. Inter-contractor split family enrollments will be consolidated either over time or at full solution. This will not be done at the time of conversion.
Enrollment fee payment process interacts with DEERS to centralize fee information for split enrollments and to provide portability.	Enrollment fee payment data is sent to DEERS as part of MCSC/DP processing to provide portability and may also be entered through the enrollment application during the initial enrollment only. Fees will be stored and reported by policy (contract-level).
Centralization and standardization of data with full incorporation of both enrollment and fiscal year CC&D information.	Fiscal year CC&D data remain in CDCF. Enrollment year CC&D data will remain with the MCSCs/DPs.
Coverage inquiry (currently called eligibility inquiry) is a query to New DEERS.	Coverage inquiry (currently called eligibility inquiry) is a query to legacy DEERS.
Centralization of Other Health Insurance (OHI) information and Standard Insurance Tables (SIT).	Not done in this release. This functionality will remain as it is currently done in legacy DEERS with the exception that the MCSCs/DPs will have the capability of setting an OHI indicator in DOES for the use of enrollment-related functions only (this indicator will not be displayed in a coverage inquiry response from Legacy DEERS).
Non Availability Statement (NAS) moves to DEERS 3.0.	Current NAS capabilities remain in legacy DEERS.

FOC Solution (From IOD)	NED Solution
New patient information is centralized and shared between DEERS and CHCS (e.g., Blood Type and Source).	Not done in this release.

Each section of this document addresses components to be delivered in the NED implementation. In addition, DEERS will support the following functions:

- ZIP code validation
  - Residence ZIP to determine jurisdiction

    The DOES application will perform a "soft" edit to ensure the beneficiary ZIP code is within the enrolling MCSC's region as well as being within the allowable ZIP code for the coverage plan. For USFHP enrollments, DEERS will perform a "soft" edit to ensure the beneficiary ZIP code is designated as part of the USFHP program, but will not edit against the region. If there is a discrepancy in either case, the DOES application will inform the user the ZIP code is not within the jurisdiction. However, it will not prevent the enrollment activity from being sent to DEERS and will allow the user to override the situation if necessary.

    Note: Jurisdiction edits will not be supported for OCONUS or APO/FPO addresses.

  - Work ZIP Code for TRICARE Prime Remote (TPR) determination.

    The DOES application will perform a "soft" edit to ensure the beneficiary work ZIP code and address ZIP code are specifically within the allowable ZIP code for the TPR program as well as within the enrolling contractor's region. If there is a discrepancy, the DOES application will inform the user the ZIP code(s) are not within the jurisdiction. However, it will not prevent the enrollment activity from being sent to DEERS and will allow the user to override the situation if necessary.

- TRICARE USFHP coverage plans to support the Direct Care eligible population

  TRICARE USFHP allows for the enrollment of certain beneficiaries that are not eligible to enroll in TRICARE Prime coverage plans. In particular, this population includes beneficiaries over the age of 65 (regardless of Medicare eligibility) as well as dependent parents and parent-in-laws that are currently enrolled in the USFHP. (Note: DEERS will not allow new enrollments for the parent/parent-in-law population due to legislative changes.) Therefore, DEERS will support these beneficiaries by implementing USFHP Direct Care coverage plans (see NED Data Dictionary for complete listing of HCDP Plan Coverage Codes).

  Additionally, for retirees and their family members, DEERS will automatically enroll beneficiaries with a USFHP network provider in the appropriate TRICARE USFHP Direct Care Coverage for Retired Sponsors and Family Members plan for the remainder of the enrollment year when they lose their eligibility for TRICARE Prime coverage due to reaching age 65. DEERS will perform this activity in advance of the enrollee losing eligibility for TRICARE Prime coverage and will send a notification to IFMC. DEERS will not validate that enrollment fees for the previous coverage plan are current or that fees for the new plan have been collected. It will be the

responsibility of the DP to ensure that enrollment fees for the new coverage plan are collected appropriately.

- Notification of address updates made in the DOES application

  A Mailing Address Maintenance Source Code is used to identify the source of address updates. When an enrollee's address is updated through the DOES application by an MCSC, DP or Dental contractor, the Mailing Address Maintenance Source Code will indicate which type of entity made the update. Upon acceptance of an address update from DOES, DEERS will notify the MCSC/DP managing the enrollment via an Enrollment Information Transfer (EIT), and if necessary DEERS will also notify CHCS via a Primary Care Information Transfer (PIT), each containing the Mailing Address Source Code. Prior to sending an EIT, DEERS will edit the address using the CODE 1 Commercial Off-the-Shelf (COTS) product. A quality code will be included on the EIT indicating the outcome of the CODE 1 edit.

- PCM assignment within the DOES application

  DMDC/DEERS will develop a centralized PCM file containing all MCSCs' Civilian network PCMs. Additions, modifications, deletions and deactivations of PCMs will be performed in the MCSC provider system. The MCSCs will make periodic full refreshes of their provider files available for FTP retrieval by DEERS, where the data will be segregated as necessary. These files must be available for DEERS retrieval by midnight EST. If DEERS does not find the file at midnight EST, DEERS will assume that the MCSC does not have updates to the last file retrieved. The DOES application will access the central PCM file to perform provider assignments. DOES will incorporate logic to search for providers using at least one of the following combinations:

  a) PCM Id
  b) PCM Name (no wildcards)
  c) PCM Group Name (no wildcards)
  d) PCM ZIP Code (entire ZIP Code or the first 3 digits only)
  e) PCM City, PCM State
  f) PCM Specialty, PCM ZIP Code (entire ZIP Code or the first 3 digits only)
  g) PCM Specialty, PCM City, PCM State
  h) PCM Gender, PCM ZIP Code (entire ZIP Code or the first 3 digits only)
  i) PCM Gender, PCM City, PCM State

  DOES will return all PCM records matching the specified criteria for the user's selection. If the selected PCM's location begin date with the MCSC is after the enrollment begin date, or if the end location date is prior to the enrollment begin date, DOES will display an error to the user and request that another PCM be selected. Additionally, for TPR coverage plans, DOES will only return records where the

Remote Enrollee PCM Assignment Indicator Code is "yes" (see Civilian PCM file, Appendix A).

It should be noted that DEERS will not attempt to reconcile and consolidate PCMs to create a unique identifier. The MCSC-supplied PCM Id will be stored as an attribute of the enrollment, not as a relationship to the central file until the HIPAA provider Id is available. Consequently, bulk PCM changes will not be accommodated via DOES.

- TRICARE Enrollment Cards and Card production

  DMDC/DEERS will be responsible for producing the TRICARE Universal Beneficiary Card for both CONUS and OCONUS. The cards will be produced for beneficiaries enrolled in TRICARE Prime, TRICARE Prime Remote, OCONUS TRICARE Prime and TRICARE Senior Prime. Each DP will continue to produce enrollment cards for its enrollees.

There are also features requested by TMA or the MCSCs/DPs for the initial NED release, that are being scheduled for subsequent software releases by DEERS subject to funding. In summary they are:

- Online Address Validation

  DMDC is still investigating the technical solution for online address validation and will provide a determination as to the implementation at a later date. If implemented, the address validation would work as follows:

  When an enrollee's address is added or updated in the DOES application, it would be run through the CODE-1 Commercial Off-the-Shelf (COTS) product for mail-ability validation. If the address fails CODE-1 validation, DOES would display the error(s) to the user. The user would then re-enter the address or override the CODE-1 determination and accept the address. Any time CODE-1 finds an address un-mailable and an ID card needs to be generated, DOES would give the user the option to either send an enrollment ID card to the address or to suspend ID card production until an acceptable address is obtained.

  Until online address validation within DOES is implemented, DEERS will not send an enrollment ID card to any enrollee with a Mailing Address Quality Code of “9” (the address was not verified or standardized by the address software and may not be a valid mailing address). The enrolling MCSC/DP will receive this code on the EIT and must correct the address in DOES in order for DEERS to send the ID card. In this case, there is no need to trigger a card to be generated as a separate action. If the MCSC/DP cannot obtain an acceptable mailing address, they should indicate in DOES that the card should be sent to the address regardless of the CODE-1 determination.

Please note: CODE-1 will not validate foreign addresses. The Mailing Address Quality Code for all foreign addresses will be "9". DEERS will always send an ID card for a foreign address since they cannot be validated.

- Additional Online Fee Payments (other than the initial fee payment)
- Enrollment Fee Payment Transaction History
- Disenrollment due to failure to pay fees will only be supported initially in online mode. In the next release, DEERS will support these disenrollments through the Fee Payment File transfers. All individual enrollment fee waiver information for split family enrollments (e.g., "free rider") to support this batch update will be accepted online in the initial delivery.

Additionally, the following features are under evaluation for future software releases:

- Capability to pend an enrollment in the DOES application for development
- Enrollment fee edits within the DOES application

2. COMPONENTS DESCRIPTIONS

The NED portability solution involves four basic business components, all of which are available DEERS capabilities.

2.1 Enrollment and Enrollment Change Processing

- Enrollments, including initial fee information and additional fields are returned to the MCSCs'/DPs' systems to eliminate the need for any additional data entry by the MCSC/DP. Fee information will include fee payment exceptions for split enrollment, (e.g., "free rider"). In addition, there will also be functionality to support individual beneficiary enrollment fee waivers as described in IOD v13.1. It is important to note that DEERS will not edit or prorate fees, identify missing fee payments, determine the amount or date of the next fee payment, send enrollment fee payment notifications or identify what entity is responsible for enrollment fee payments. These actions are the responsibility of the enrolling organization and may require additional edits to be performed by the subcontractors within their own systems. As previously stated, DEERS will store enrollment fee information at the policy-level, not at the family-level. The MCSCs/DPs will be responsible for accumulating any fee information for all family members enrolled in the same coverage plan across policies.
- Enrollment period changes
- Disenrollments (voluntary and involuntary, including failure to pay fees)
- Enrollment and disenrollment cancellations
- Changes to provider information based on network, enrolling division and/or PCM change which can be done in the DOES application, or sent in batch mode to DEERS (currently Civilian network providers only) as described in sections to follow
- Address updates

2.2 Notifications

- Notifications to the appropriate CHCS site of enrollment activity affecting its Direct Care network PCM population along with Civilian network PCM assignments (currently regions 1, 2/5 only) to facilitate patient registration and referral processes
- Notifications to the appropriate MCSC/DP site of transfers of enrollments between MCSCs/DPs
- Notifications to all effected MCSC/DP and CHCS sites when DEERS performs a disenrollment due to loss of eligibility
- Notification to all effected MCSC/DP and CHCS sites when another contractor performs a disenrollment when the beneficiary has relocated and does not wish to re-enroll with the new MCSC/DP
- Notification to all effected MCSC/DP and CHCS sites when a DOES user updates the

address of an enrollee. The notification will include a Mailing Maintenance Source Code, indicating whether a Dental contractor, MCSC or DP made the update.

- Notifications to all MCSC/DP sites when they request an EIT to be sent by DEERS. This type of notification will be supported by the use of a trigger-button in the DOES application.

- Notifications to all CHCS sites when an MCSC user requests that a PIT to be sent by DEERS. This type of notification will be supported by the use of a trigger-button in the DOES application.

Note: The interface with CHCS will not be encrypted for the initial NED release.

2.3 Bulk PCM changes

- Done by the MCSCs as a result of a loss of a PCM and subsequent re-assignment of that PCM's enrollees to another PCM. These are sent to DEERS who makes the necessary PCM updates and then sends them to the appropriate CHCS site (currently, regions 1, 2/5 only). This functionality is only available for re-assignments to Civilian network providers.

- PCM changes for the USFHP network providers will be done using the DOES application. Currently the volume of PCM changes within the USFHP network is not as great and therefore this functionality is not necessary for this type of PCM selection.

2.4 Fee Payment Processing

- Receipt and storage (by policy) of enrolled families' fee information from MCSC/DP processing
- Distribute total and detailed last payment information for the current policy to the enrolling MCSC/DP on a transfer of enrollment
- Although it has been requested that online fee payments after the initial enrollment that has an accompanying fee payment be provided in the DOES application, this feature will be postponed for delivery after the initial NED implementation.
- Enrollment fee payments sent to DEERS with the initial enrollment will be mirrored back to the MCSC/DP sending the fee payment. The fee accumulation information to date will also be sent on the EIT. If no fee payment information is sent to DEERS, DEERS will always include the fee accumulation to date.

3. ENROLLMENT AND ENROLLMENT CHANGE PROCESSING WITH NOTIFICATIONS

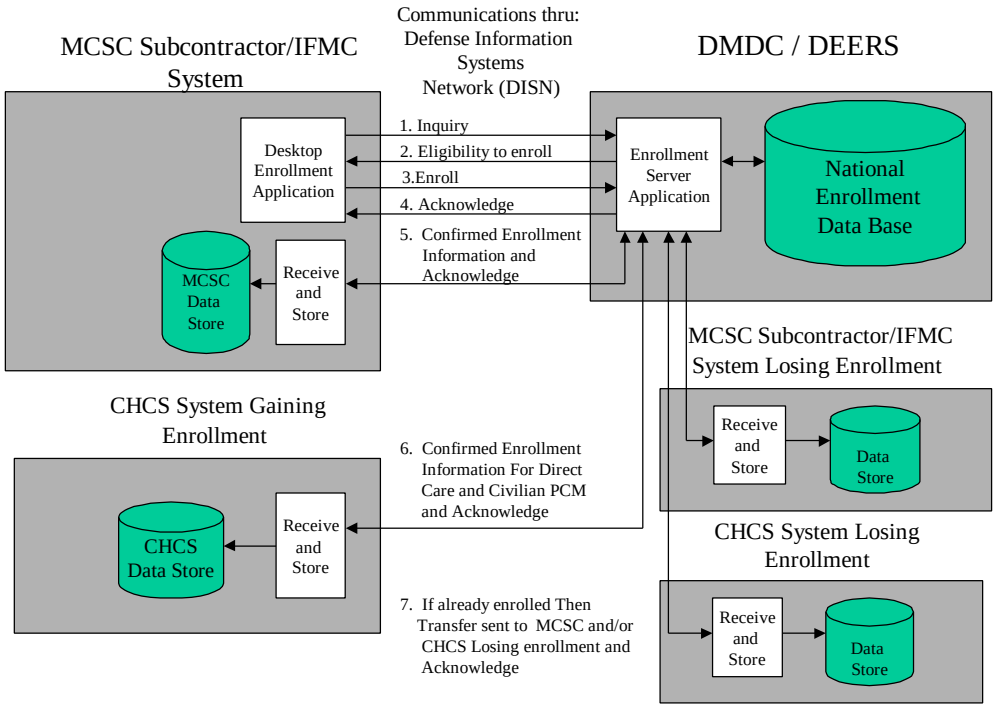

Figure 1

The enrollment or enrollment change process will proceed as follows in real-time:

1. The MCSC/DP Enrollment Application operator at a regional enrollment site enters the Sponsor SSN in the DOES application to initiate an inquiry.

2. DEERS returns the family record with demographic data, eligibility information, and any current enrollment data and displays the information in the DOES application. If there is an enrollment within the previous 12 months, that information will also be displayed.

3. The MCSC/DP Enrollment Application operator adds or modifies enrollment information, including PCM data using the DOES application.

4. DEERS confirms operator's updates and returns acknowledgement to the DOES application.

5. DEERS flags updated records that necessitate updates to Legacy DEERS. Updates to Legacy DEERS are made through a process run routinely throughout the day. Once Legacy DEERS is updated, the update flags are reset. Reports are generated for records where the update flag is not reset within a specified amount of time. DEERS

personnel work these reports to resolve all discrepancies (see Transaction Integrity section of this document).

6. DEERS sends all enrollment data back in legacy format to the MCSC subcontractor/IFMC system for receipt and storage in its database. Although it is expected that the DOES application will be at sites under the prime MCSCs/DPs within the region, the Receive and Store Application will probably be at the MCSC subcontractor's/IFMC's Information Systems (IS) sites close to their enrollment data stores. DEERS expects the MCSC subcontractors/IFMC to provide a TCP/IP confirmation acknowledging the receipt of each enrollment notification and will continue to send the enrollment information until receipt is acknowledged (see Transaction Integrity section of this document).
   - By DEERS allowing the entry of all information pertinent to the enrollment, including such fields as work ZIP code and email address, and all pertinent dates of receipt and entry, no further update on this initial enrollment needs to be done by the MCSC/DP. In addition, DEERS will send information contained in DEERS, such as member category and Operator Id, back with the EIT to avoid dual entry.
   - DEERS can receive initial fee information from the DOES application including any enrollment fee payment exception (e.g., "free rider") at the time of the initial enrollment. Additional functionality will also be provided to communicate individual beneficiary enrollment fee waiver information.
7. DEERS will send a notification (based on the enrolling division's DMIS identifier), with the PCM enrollment information for both Direct Care and Civilian (currently regions 1, 2/5 only) network providers, to the appropriate CHCS host that is associated with the PCM. DEERS expects the CHCS host to provide a TCP/IP confirmation acknowledging the receipt of each enrollment notification and will continue to send the PCM information until receipt is acknowledged. DEERS will assume that if no routing information is provided for a DMIS ID it is not necessary to send a notification to CHCS. As previously stated enrollments with USFHP network provider selections will not be sent to CHCS.
8. The MCSC subcontractor/IFMC system and/or CHCS host that are losing the enrollment will also be notified real-time via legacy data-based transfers. DEERS expects both the MCSC subcontractor/IFMC and the CHCS host to provide a TCP/IP confirmation acknowledging the receipt of each enrollment notification and will continue to send the disenrollment information until receipt is acknowledged (see Transaction Integrity section of this document).

3.1 DMDC/DEERS Desktop Enrollment Application, DOES

3.1.1 Description

The DOES application is a Visual Basic application that will be supplied to the MCSCs/DPs by DEERS. In order to provide portability, all TRICARE enrollments, disenrollments, cancellations, and non-bulk PCM data changes *must* be entered into DEERS via the DOES application.

3.1.2 Display Screens

- Demographic data on sponsors and dependents, including beneficiary address information
- Eligibility for specific TRICARE plans for each beneficiary
- Current enrollments, PCM data, and fees

3.1.3 Allowable Entries

- Address changes
- Enrollments, including
  - Initial fee payment or enrollment fee exception reason for split enrollments (e.g., "free-rider") at the time of the initial enrollment
  - PCM Selection with related information
  - All pertinent enrollment information including contractor required additional fields for audit, ZIP codes, individual enrollment fee waivers, etc., (see EIT transfer, Appendix A)
- Enrollment changes, such as begin date
- Enrollment transfers when a beneficiary moves between MCSCs/DPs
- Disenrollments; voluntary and involuntary
- Cancellations of enrollment, disenrollments, PCM changes, enrollment transfers
- PCM data changes

The DOES application will include edits based on type of enrollments, duration of enrollments, and required selections (e.g., PCM), all based on the TRICARE plan selected. It will provide menu driven data entry and control table editing. Complete descriptions of the edits are included in Appendix C, NED Business Rules.

3.1.4 Communications

The DOES application will be provided to the MCSCs/DPs with full capability to communicate with the NED in an encrypted proprietary format over the DISN or

commercial Internet. All workstations running the DOES application must connect to the DISN or commercial Internet via TCP/IP protocol. The MCSC/DP and/or MCSC subcontractor/IFMC must resolve all internal firewall issues, such as enabling access to IP Addresses and Ports specified by DMDC.

Each location running instances of the DOES application will be considered a Site and will be given a Site ID by DEERS. After the user logs in for the first time, the Site ID will be imbedded in the DOES application. The first installation of the DOES application will be performed via CD-ROM. All software distribution and upgrades done thereafter will be via Web distribution to each site based on the Site ID. The MCSCs/DPs and IFMC must provide a browser (Netscape or Internet Explorer) at each application location for this access.

In addition, each Site must have an assigned Site Security Manager (SSM) who will have access to a DMDC Security application that will be provided by DEERS. The DMDC Security application will allow SSMs to add and maintain DOES application users at his/her site.

3.1.5 System Requirements

The following is the "minimal" hardware and software requirements for all workstations running the DOES application. It is based on the same standard for running Microsoft Windows NT 4.0. Like Microsoft Windows NT 4.0, it is strongly suggested that workstations running the DOES application exceed the minimal requirements for optimal performance.[1]

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[1] TMA and DMDC, in coordination with an MCSC, performed a test to determine DOES operability in a non-NT environment. The following information is included to give the MCSCs/DPs/IFMC an idea of resource utilization of the DOES application:

> On Thursday, May 11, 2000 TMA and DMDC representatives, in conjunction with an MCSC, conducted a DOES test at the MCSC facility in order to note the DOES application performance and operability in a typical enrollment clerk's work environment. This function was not performed by an independent agency and the results are intended for consideration for MCSC hardware and software procurement requirements. The DOES application was installed on 10 PC user workstations, each with a configuration as listed below:
>
> - Pentium 133 MHz processor
> - 15" VGA color monitors
> - 32 Mb of RAM
> - Windows 95 operating system
>
> At a specified time during the day, each enrollment clerk was instructed to open, or launch, the DOES application with the following software applications running:
>
> - Microsoft Outlook 97
> - CHCS Rumba Terminal Session
> - PGBA Rumba Terminal Session
> - Microsoft Internet Explorer Version 4
> - 3 proprietary MCSC database applications
>
> These programs were identified by the MCSC executives as the most common set of enrollment clerk PC applications that would be running simultaneously during a normal workday.

3.1.5.1 Hardware Platform

At a minimum, the hardware platform will consist of an Intel based 120 MHz Pentium with a minimum of 32 MB RAM and a minimum display resolution of 800 x 600.

3.1.5.2 Operating System

Microsoft Windows NT 4.0 (Service Pack 5). Microsoft Windows 95 and 98 will not be supported.

3.1.5.3 Disk Space

After the operating system and all accompanying applications are loaded, 100 MB of free disk space is required.

3.1.5.4 Technical Issues

There are currently no technical issues relative to the system requirements.

At the specified time, each clerk launched the DOES application simultaneously, proceeded to log into the DOES application and performed a unique TRICARE enrollment eligibility inquiry using individual test beneficiaries provided by DMDC. While each enrollment clerk had the DOES enrollment application running, a new TRICARE enrollment was performed successfully by the TMA representative. The only performance issue reported by the participants was the failure of the DOES application to launch when the enrollment clerk performed too many mouse clicks on the DOES application shortcut icon on the user's desktop. The DMDC representative indicated this was due to the fact that DOES 1.0 was developed for Windows 98/NT environments and thus was not tested on Windows 95.

All representatives were then provided with the memory usage and performance indicators of each of the open software applications on an individual desktop PC. The anticipated sum of the components of the DOES application will use approximately 15 K of memory, with the above listed additional applications running simultaneously. The actual memory usage of the DOES application components will be published in the subsequent change order language presented to the MCSC contractors, and included in the technical specifications documentation published by DMDC. For purposes of this test, the actual memory usage recorded for each enrollment clerk application are as given in the table below:

APPLICATION	MEMORY USAGE
MS Outlook '97	3.1 K
MS Internet Explorer 4.0	3.5 K
DOES (including TDA20.exe)	13.4K
CHCS Terminal Session	18.7 K
PGBA Terminal Session	2.5 K
3 Proprietary Database Applications & all other Windows NT 4.0 processes	17 K
TOTAL:	58.2 K

At this time, TMA and DMDC view the DOES application as successfully operational, with no significant technical issues when the application is run in the recommended environment. TMA recommends the minimum system requirements as published by DMDC in the Technical Specifications for the TRICARE National Enrollment Database (NED) Solution Version 6.

3.2 DMDC/DEERS Enrollment Server Application

3.2.1 Description

When communicating with the DOES application, the DMDC/DEERS Enrollment Server Application accesses the DEERS database for demographic and eligibility information and the NED for enrollment, fee, and PCM assignment data. On its return from the client application, updated data is edited and stored, and an acknowledgment is sent to the DOES application. All of these activities take place between the client and the server applications and are under the full control of DEERS-provided software. The MCSCs/DPs merely provide DEERS a connection to the DISN for the client application.

After the enrollment is acknowledged, the Enrollment Server Application will send a real-time transfer to each information system affected by the new enrollments or by the change to existing enrollments. These transfers, called the Enrollment Information Transfer (EIT) and the PCM Information Transfer (PIT), will be in a DEERS proprietary format and are described in Data Transfer Formats section, Appendix A, of this document. The notifications contain data in legacy format and must be received and stored by the MCSC subcontractor/IFMC and CHCS systems appropriately. IFMC will distribute all notifications to the appropriate DP. Through the use of these notification transfers, DEERS will always keep all MCSC/DP systems in sync with DEERS for the current and future (if applicable) enrollment, and will always keep CHCS systems in sync with DEERS for the current and future (if applicable) PCM selection.

3.2.2 Communications

The Enrollment Server application will communicate with the DOES application via encrypted TCP/IP transfer over the DISN. All communications to and from the DOES application are strictly internal to DEERS and do not affect the MCSC/DP except that MCSCs/DPs must provide a communications link to the DISN from their enrollment sites.

When the Enrollment Server application communicates to the other systems (MCSC subcontractors/IFMC and CHCS) a Receive and Store Application, provided by the MCSC subcontractor/IFMC and CHCS, must be ready to accept data on enrollment information. The Store and Receive applications will also have to have an IP address on the DISN that can receive data and pass it to systems' data stores. The transfer will be in a DEERS proprietary format, using TCP/IP, and will be encrypted using a Government Off the Shelf (GOTS) algorithm that will be supplied to the MCSC subcontractor/IFMC and CHCS systems by DEERS.

3.2.3 System Requirements

System Requirements information is internal to DEERS.

3.2.4 Technical Issues

3.2.4.1 Primary Requirements

The primary requirements addressed by the return of the confirmed enrollment information, in legacy format, to the information system of the sending MCSC/DP are:

- To eliminate double entry of the data (see additional fields on Enrollment Information Transfer).
- To translate new (DEERS FOC) plans and codes back to old (legacy).

3.2.4.2 Assumptions

- The basic format of each contractor's data cannot be provided, but the legacy data is similar enough to that format that minimal translation is required.
- The MCSC subcontractor/IFMC information system is the proper place for the DMDC/DEERS Enrollment Server application to send this data
- The enrollee address, entered through the DOES application, will also be returned to the MCSC/DP after being edited using the CODE-1 COTS product. A quality code will be returned on the EIT to indicate the outcome of the CODE-1 edit.

3.3 Enrollment Information Transfer Receive and Store Applications

3.3.1 Description

The Receive and Store applications for the EIT and PIT from DEERS will be written by the MCSC subcontractor/IFMC and CHCS to accept real-time data transfers using TCP/IP sent by DEERS over the DISN. The EIT will be encrypted by an algorithm, for which DEERS will provide a DLL for NT, Mainframe or UNIX, in either a 16- or a 32-bit format. The data must be used to update the MCSC subcontractor/IFMC systems and CHCS host data stores with the new or changed enrollment data.

The EIT will be sent to MCSC subcontractor/IFMC and the PIT will be sent to CHCS sites as a result of modifications to the National Enrollment Database. These modifications will include:

- New enrollment
- Transfer of enrollment
- Modification to an existing enrollment
  - PCM change
  - Cancellation of enrollment / disenrollment / PCM change / transfer
  - Change of Enrollment period, including those affecting an anniversary date
  - Voluntary / Involuntary disenrollment

3.3.2 Communications

Communications will be via a DISN IP interface with TCP/IP capabilities. DEERS expects the MCSC subcontractor/IFMC and CHCS host to provide a TCP/IP confirmation acknowledging the receipt of each enrollment notification. DEERS will provide five bytes of data indicating the length of the transfer directly preceding each EIT.

3.3.3 System Requirements

System Requirements will be internal to the MCSC subcontractors/IFMC and CHCS.

3.3.4 Technical Issues

None at this time

3.3.5. Assumptions

- For new enrollments, it is assumed to be the most efficient way to get this data back to the MCSCs/DPs for continued processing of the enrollment.

- It is assumed that real-time is the best way to send this information, as opposed to sending periodic (e.g., daily) files, therefore DISN TCP/IP connections are required.
- It is assumed that encryption of the transfers is required and that the "C" decryption routines can be incorporated as an application call from the MCSC subcontractor/IFMC sockets.

4. DISENROLLMENT DUE TO LOSS OF ELIGIBILITY NOTIFICATIONS

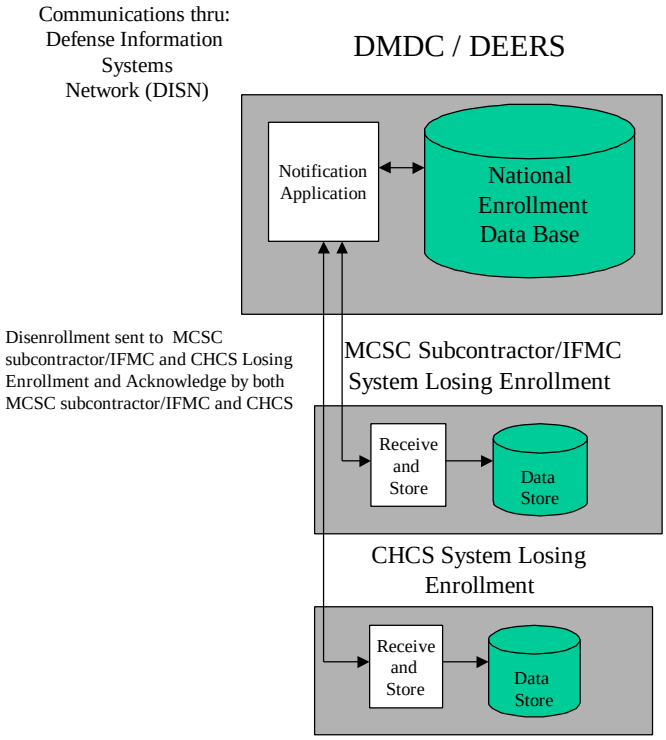

Figure 2

The disenrollment due to loss of eligibility process will proceed as follows:

1. DEERS automatically disenrolls all beneficiaries who have lost their eligibility for their enrolled program as updates occur to sponsor and family member data via service personnel batch and online sources resulting with an end of eligibility for the enrolled plan that is less than what was previously reported. Records for enrollees that have been disenrolled for this reason are marked for notification.
2. DEERS also flags updated records that necessitate updates to Legacy DEERS. Updates to Legacy DEERS are made through a process run periodically throughout the day. Once Legacy DEERS is updated, the update flags are reset. Reports are generated for records where the update flag is not reset within a specified amount of time. DEERS personnel work these reports to resolve all discrepancies (see Transaction Integrity section of this document).
3. Marked enrollment losses from this process are sent as disenrollments to MCSC subcontractor/IFMC systems and CHCS hosts that are affected, using the EIT and PIT respectively. This can be done real-time or periodically in batch (daily) depending on the overall system requirements. In addition, DEERS expects the MCSC subcontractor/IFMC and CHCS host to provide a TCP/IP confirmation

acknowledging the receipt of each enrollment notification. DEERS will continue to send the enrollment information until receipt is acknowledged (see Transaction Integrity section of this document).

4. CHCS hosts are identified by System Ids (and from the Id, via its IP address) associated to the DMIS ID of the PCM Enrolling Division in the DEERS database. DEERS will assume that if no routing information is provided for a DMIS ID it is not necessary to send a notification to CHCS. As previously stated notifications for USFHP network PCM selections will not be sent to CHCS.
5. MCSC subcontractor/IFMC systems are identified by System Ids (and from the Id, via its IP address) recorded on the enrollment record.

4.1 Loss of Eligibility Application

4.1.1 Description

The Loss of Eligibility Application is a DEERS internal application that sends disenrollments to affected MCSC subcontractor/IFMC systems and CHCS hosts when beneficiaries have lost their eligibility due to an update supplied to DEERS by Service Personnel or Finance sources.

4.1.2 Communications

The disenrollment data will be sent via the EIT for MCSC subcontractors/IFMC and the PIT for CHCS, referenced earlier, are described in the Data Transfer Format section, Appendix A, of this document. DEERS will provide five bytes of data indicating the length of the transfer directly preceding each EIT.

As in the earlier processes of enrollment and enrollment change, the transfers will be sent to an IP address in encrypted (EIT only) TCP/IP over the DISN and will communicate with the Receive and Store Application. This process will be real-time transmission and not a batch process.

4.1.3 System Requirements

The system requirements are internal to DEERS.

4.1.4 Technical Issues

None at this time

4.2 Disenrollment Due to Loss of Eligibility Notification Receive and Store Applications

4.2.1 Description

These Receive and Store Applications may be the same application written by the MCSC subcontractors/IFMC and CHCS to accept real-time enrollment and disenrollment data transfers by DEERS via TCP/IP over the DISN, because the transfer will be in the EIT and PIT formats respectively. The EIT will be encrypted, but DEERS will provide the decryption DLL in 16- or 32-bit format for NT, Mainframe or UNIX. This data must be used to update the MCSC subcontractor/IFMC system and CHCS host data stores with the new or changed enrollment data as appropriate to keep in sync with DEERS.

4.2.2 Communications

Communications will be via a DISN IP interface with TCP/IP capabilities. In addition, DEERS expects the MCSC subcontractor/IFMC and CHCS host to provide a TCP/IP confirmation acknowledging the receipt of each enrollment notification. DEERS will provide five bytes of data indicating the length of the transfer directly preceding each EIT.

4.2.3 System Requirements

The system requirements are internal to MCSC subcontractors/IFMC and CHCS.

4.2.4 Technical Issues

None at this time

4.2.5 Assumptions

- It is assumed that real-time is the best way to send this information as opposed to sending periodic (e.g., daily) files, thus DISN / TCP/IP connections are required.
- It is assumed that encryption of the transfers is required (EIT only) and that the DEERS “C” decryption routines can be incorporated as a call-out from the MCSC subcontractor/IFMC sockets.
- It is assumed that if no routing information is provided for a DMIS ID it is not necessary to send a notification to CHCS.

5. BATCH FEE PAYMENT UPDATES TO DEERS

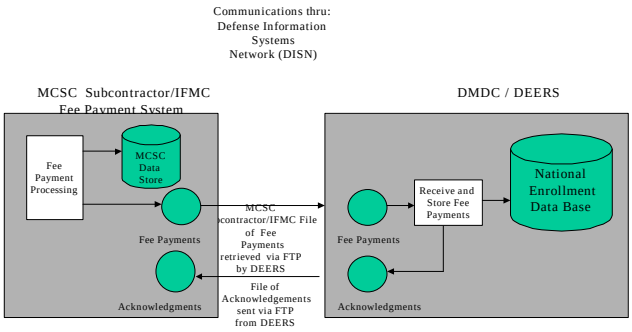

Figure 3

The fee payment data will be archived centrally on DEERS to facilitate portability and can be accessed via the DOES application when an enrollment transfer occurs. The fee payment updates will be provided as follows:

1. As each MCSC/DP processes fee payments, a file of updates should be created under the old key (Sponsor SSN) by the MCSC subcontractor/IFMC system. This file, which is encrypted by the MCSC subcontractor/IFMC, will represent all of the fee payments processed in one cycle.
2. The fee payment file is retrieved by DEERS via FTP on the DISN and is decrypted.
3. DEERS will then apply these same fee payments to the NED and will return acknowledgment\error transfers to the MCSC subcontractor/IFMC.

Additional online updates of enrollment fees by the MCSCs/DPs using the DOES application will be postponed to a delivery date following the initial NED release.

5.1 Fee Payments File

5.1.1 Description

The Fee Payments File will be created by each MCSC subcontractor/IFMC as part of their batch cycle. The record format is defined in the Data Transfer Formats section, Appendix A, of this document. Daily, DEERS will retrieve and store the data file for processing. Once DEERS processes the data, the data file will be deleted and the system will be ready for the next file.

There are two basic types of fee transactions in the Fee Payment File that DEERS will be expecting for the NED delivery:

- Fee payment or adjustment
- Fee payment exception reason due to an enrollment transfer, based on a family reaching their yearly catastrophic cap, or a split enrollment situation

An additional type may be supported in a subsequent release:

- Disenrollment Due to Failure to Pay Fees

5.1.2 Communications

Communications will be via FTP over the DISN. Each MCSC will be given a specific name and identifier for the FTP file. DEERS expects the fee payment file to be encrypted by the MCSC subcontractor/IFMC prior to the transmission of the file done by DEERS.

5.1.3 System Requirements

System requirements are internal to DEERS and the MCSC subcontractors/IFMC. This interface will be encrypted by an algorithm, for which DEERS will provide a DLL for NT, Mainframe or UNIX, in either a 16- or a 32-bit format.

5.1.4 Technical Issues

None at this time

5.1.5 Assumptions

It is assumed that the fee payment posting process is done in batch by the MCSCs/DPs rather than by online data entry.

6. BULK PCM UPDATES TO DEERS

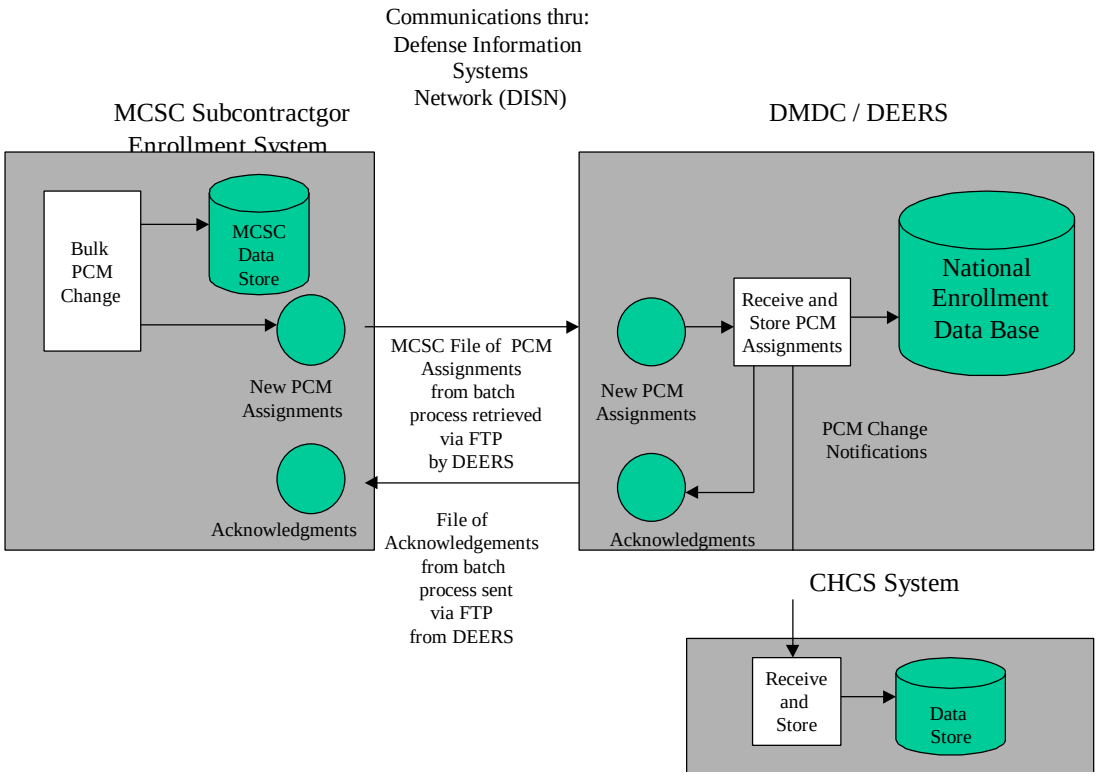

Figure 4

The MCSCs will be required to do bulk PCM modifications if a PCM's workload is re-assigned to a Civilian network PCM.

The process is as follows:

1. Each MCSC will process bulk PCM changes and create new PCM assignments for beneficiaries within their system. These new PCM assignments will be written to a file, which is encrypted by the MCSC subcontractor, under the old key (Sponsor SSN and legacy DDS) for each affected beneficiary.

2. The MCSC PCM file is retrieved via FTP by DEERS on the DISN and is decrypted.

3. DEERS will then apply these same PCM updates to the NED and return an acknowledgment\error transfer to the MCSC subcontractor.

4. DEERS will then send the PIT to the effected CHCS site(s) (currently regions 1, 2/5 only).

6.1 New PCM Assignments File

6.1.1 Description

Each MCSC subcontractor will create the PCM Batch Change Transfers (PBCT). The record format is defined in the Data Transfer Formats section, Appendix A, of this document. Daily, DEERS will retrieve and store the data file for processing. Once DEERS processes the data, the data file will be deleted and the system will be ready for the next file.

6.1.2 Communications

Communications will be via FTP over the DISN to a DEERS IP address. Each MCSC subcontractor will be given a specific name and identifier for the FTP file. DEERS expects the PCM file to be encrypted by the MCSC subcontractor prior to the transmission of the file done by DEERS.

6.1.3 System Requirements

The System Requirements are internal to DEERS, MCSC subcontractors and CHCS.

This interface will be encrypted by an algorithm, for which DEERS will provide a DLL for NT, Mainframe or UNIX, in either a 16- or a 32-bit format.

6.1.4 Technical Issues

None at this time

7. TRANSACTION INTEGRITY

DEERS will perform the following measures to ensure end-to-end transaction integrity:

7.1 DOES Transactions

When an enrollment or beneficiary (e.g., address) update is made in the DOES application, DEERS will check that for the record DOES is updating, DEERS is not processing a notification for another transaction resulting in a change in either the managing MCSC/DP or the PCM's CHCS host site. If this happens to be the case, DEERS will not allow DOES to update the record. The DOES user will receive an online notification that the transaction could not be applied to the NED. When DEERS accepts the DOES update, DOES will display a message to the user that the transaction successfully updated the NED.

In cases where DEERS continuously responds over a long period of time that DOES cannot update the NED for a particular beneficiary due to a notification being processed, assuming there are no other network problems, the MCSC/DP operator should contact the DEERS Support Office via the DMDC-provided toll-free telephone number. Additional information will be provided during the DOES train-the-trainer sessions and in DOES online help.

7.2 Updates to Legacy DEERS

Upon successful update of the NED by DOES, DEERS will flag all updated records that must also be reflected in Legacy DEERS. Continuously throughout the day, DEERS runs a process to update Legacy DEERS with the NED records that have been flagged. Once each record is run through the process of updating Legacy DEERS, the flag is reset. DEERS runs reports of records whose flags are not reset within a specified period of time. DEERS Support Office staff work to resolve any reported discrepancies.

In cases where the MCSCs/DPs notice discrepancies between the NED and Legacy DEERS enrollment data for a particular beneficiary, they should contact the DEERS Support Office via the DMDC-provided toll-free telephone number. Additional information will be provided during the DOES train-the-trainer sessions.

7.3 Notifications

Each time DEERS sends a notification to an MCSC subcontractor/IFMC or CHCS, it will wait for an acknowledgement of the transaction. DEERS will continue to resend all notifications until they are acknowledged by the receiving system. If a network problem prohibits communication between DEERS and an MCSC subcontractor/IFMC or CHCS system, DEERS will log all notifications for that system until communications are restored. At that time, DEERS will retransmit the backlogged notifications in the order the transactions were processed.

If an MCSC subcontractor/IFMC or a CHCS site discovers a problem with DEERS notifications, the site's network manager should contact DEERS. Additional information will be provided during the DOES train-the-trainer sessions.

8. IMPLEMENTATION

8.1 Data Conversion and Reconciliation

Before the NED solution is implemented, a conversion and reconciliation process will take place to synchronize the MCSC, CHCS, and DEERS systems. DEERS will provide the MCSCs, DPs (through IFMC) and CHCS with enrollment gold files out of the conversion. The complete redesign of the DEERS data model will take place with the full implementation. The conversion associated with the complete redesign may be able to be done internally.

A detailed explanation of the NED conversion and reconciliation process is described in the NED Data Conversion Specifications document and is therefore not described in this document.

8.2 Testing

A System Test Plan and a timeline to include Government Pre-Installation Acceptance Testing (GPIAT) will be published by TMA. Joint Testing scenarios should be developed by DEERS, the MCSCs/DPs, and CHCS.

8.3 Timelines and Delivery

This portability solution must be deployed and operational in all regions by the date specified by TMA. Timelines are being created at DMDC/DEERS in order to meet that date. The timelines will be coordinated with the MCSCs/DPs and CHCS.